

REMARKS

Claims 1-5 are pending in the current application. Claims 1, 3 and 5 are independent claims.

Applicants acknowledge and thank the Examiner for indicating that claims 2 and 4 contain allowable subject matter and would be allowable if rewritten in independent form including all the limitations of its base claim and any intervening claims.

Rejections under 35 U.S.C. §103

Claims 1, 3 and 5 stand rejected under 35 USC 103(a) as being unpatentable over Raheli et al. (US 6,389,079) in view of Milan et al. (US 2006/0117127). Applicants traverse this rejection.

The Examiner rejects independent claims 1 and 3 and alleges that Raheli et al. teaches “estimating polarities of a plurality of received data symbol samples” as recited in claim 1 and similarly recited in claims 3 and 5. For support the Examiner cites column 2, lines 20-23. However, column 2, lines 20-23, of Raheli et al. provides:

We could say that in the case of differential detection the signal to noise ratio (Signal-to-Noise-Ratio, or SNR) of the reference signal is the same as the SNR of the information signal.

First, Raheli et al. teaches “SNR.” On the other hand, claims 1 and 3 recites signal-to-interference+noise (SINR). Although SNR and SINR may be related concepts, a person of ordinary skill in the art is well aware that SNR and SINR are not the same thing. In addition, as can be seen from the quoted sentence above, nowhere does it teach or suggest “estimating polarities of a plurality of received data symbol samples” as recited in claim 1 and similarly recited in claims 3 and 5.

The Examiner also admits that Raheli et al. fails to teach “converting the received plurality of data symbol samples into plurality of quasi-pilot symbol samples based on the estimated polarities[,] and generating an SINR estimate based on the plurality of quasi-pilot

symbol samples such that the SINR estimate is not dependent only on the polarities of the plurality of received data symbol samples' as recited in claim 1 and similarly recited in claim 3. However, the Examiner alleges that Milan et al. teaches such limitations. Specifically, the Examiner cites reference numerals 94 and 98 of FIG. 3 in Milan et al. as teaching such limitations. Paragraph [0035] of Milan et al. provides:

The resulting baseband signal is then demodulated by the demodulator which is preferably a Direct Sequence DSSS Baseband Processor 88 in a known manner to provide the peripheral data to the signal discriminator 70a via the data & clock out signal path. The baseband processor 88 includes a de-spread processor 91, a pseudo-noise generator 92, a BPSK demodulator 94, a numeric controlled oscillator 96, a differential decoder 98 and a signal control unit 100. The baseband signal from the low pass filter 86 is de-spread and recovered to a correlated signal. The de-spread processor 91 is controlled by the pseudo-noise generator 92 in a known manner. The BPSK demodulator 94 tracks and removes the carrier frequency offset and outputs the differential encoded signal to the differential decoder 98. The numeric controlled oscillator 96 provides a tracked carrier frequency for the BPSK demodulator 94. The differential encoded signal is decoded by the differential decoder 98 to output the data signal and clock signal. The signal control unit 100 is responsible for all the controls inside the baseband processor 88 and the communication with the outside microcontroller 42 through the control interface. (Emphasis added.)

As can be seen from the above quoted paragraph, nowhere does it teach or suggest "converting the received plurality of data symbol samples into plurality of quasi-pilot symbol samples based on the estimated polarities[,] and generating an SINR estimate based on the plurality of quasi-pilot symbol samples such that the SINR estimate is not dependent only on the polarities of the plurality of received data symbol samples" as recited in claim 1 and similarly recited in claims 3 and 5.

Accordingly, even if the teachings of Raheli et al. can be combined with the teachings of Milan et al., the combination would still fail to teach each and every limitation recited in independent claims 1, 3 and 5. For at least the reasons given above, Applicants submit that claims 1 and 3 are patentable over the Examiner's cited references.

CONCLUSION

Accordingly, in view of the above, reconsideration of the rejections and allowance of each of claims 1-5 in connection with the present application is earnestly solicited.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicants hereby petition for a one (1) month extension of time for filing a reply to the outstanding Office Action and submit the required \$120.00 extension fee herewith.


Should there be any outstanding matters that need to be resolved in the present application; the Examiner is respectfully requested to contact the undersigned at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNES, DICKEY, & PIERCE, P.L.C.

By  Reg. No. 45,261

 Gary D. Yacura, Reg. No. 35,416

P.O. Box 8910
Reston, Virginia 20195
(703) 668-8000

GDY/LYP:psy